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АКТУАЛЬНІ ПИТАННЯ ТЕРЕТИЧНОЇ ТА ПРАКТИЧНОЇ МЕДИЦИНИ

Topical Issues of Clinical and Theoretical Medicine

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fermentative microorganisms. The results are similar to the trends observed in ORAN of most of Europe.

STRUCTURAL AND FUNCTIONAL CONDITION OF LIVER OF CHILDREN WITH ESCHERICHIOSIS INFECTED BY EPSTEIN-BARR VIRUS

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From year to year the frequency of combined infections increases in pediatrician practice. One of the most common infections are Herpes viral and bacterial intestinal infection, including - Escherichiosis. The course of disease is basically determined by the condition of internal organs, especially - the liver.

Purpose of investigation to study structural and functional condition of the liver in children with Escherichiosis, infected by Epstein-Barr virus (EBV).

The liver ultrasound investigation and liver function test in 64 children 1 mo - 3 years with moderate forms of Escherichiosis were done. Among all patients 25 children with persistent EBV infection have been isolated (co-infection).The parenchymal reaction of liver with increased echogenicity to 10-12 gradation was found in 20 (80%) patients, the signs of hepatosplenitis in 4 patients (16%), liver gate lymphadenitis in 16 patients (64%), mesadenitis in 12 patients (48%) with co-infection. An examination of patients with Escherichiosis (mono-infection) revealed parenchymal reactions of liver only in 10 patients (25,64%) with a slight increase of tissue echogenicity. There was only one case of hepatitis among patients with mono-infection, and no inflammation of the lymph nodes. Comparison of liver function test revealed increase of ALT in 13 children (52%) with co-infection. The level of ALT exceeded the physiological parameters not more than one and a half times. All patients with Escherichiosis without EBV infection have normal rates of the liver test.

Thus Escherichiosis in young children with persistent EBV infection is accompanied by changes of liver structural and functional condition that must be considered at all stages of treatment.

EFFECTS OF EXPERIMENTAL HYPOXIA ON IRON BALANCE IN THE BRAIN TISSUE OF RATS

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Hypoxic-ischemic lesion is one of important problems of neonatology, which is determined by their place in the structure of morbidity, perinatal mortality and a value in the disorders formation. Microelements provide course of important biological reactions and are catalysts of many of them.

Research purpose: to research iron cerebral tissue supply in case of experimental hypoxia with different degrees of complexity.

Microelement supply for iron was studied as well as the lead level of cerebral tissue in experimental hypoxia conditions. Microelement supply was investigated on 44 laboratory rodents on their first and seventh days.

The newborn rats had a high level of iron in their cerebral tissues like 571,5±1,5 mkg/g. Microelement level was rapidly reduced after a week of their born. It might be caused by high usage of tissue iron during oxidative reactions and energy generation processes. In this case the iron level was just 58,33±1,09 mkg/g.

The correlation analysis of contained iron level in animal organs on their first alive day pointed out that the level of element correlation in brain with iron level of other organs is quiet weak (r= -0,28 for the liver) or totally absent (r= 0,12 for the kidneys and r= -0,07 for the heart).

When there is light hypoxia stage in animal organism the iron content in brain is reducing twice. In case of complicated hypoxia its content reduced for 36,64% ($p \leq 0,05$). Thus animals, which were one-week old, had the same level of element in comparison to monitored animal group and it was 50,00±0,65 mkg/g for light hypoxia and 47,67±0,81 mkg/g for complicated hypoxia. During hypoxia against iron fall-off may be formed positive element content correlation between brain and liver (r=0,54) and brain and heart (r=0,49) and strong negative correlations between its level in brain and kidneys (r= -0,84).

In newborns' organisms mild-power converse correlations are formed between element level in brain and kidneys (r= -0,58) in case of complicated hypoxia stage.

So, brain tissue of neonatal rats is characterized by high intensity and great dynamism of iron. By the end of the first week of life the content of these minerals decreases in 1.5 - 10 times.

OUTCOMES OF BRAIN DAMAGE IN TERM NEONATES WITH SEVERE HYPOXIC ISCHEMIC ENCEPHALOPATHY

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Study is to describe clinical and neuroimaging data of term newborns admitted to neonatal NICU, who presented clinical-neurological alterations and encephalomalacic lesions whose presence was documented by ultrasonography or pathologic-anatomical conclusions. Stationary cards 18 full-term infants who were treat in NICU studied. In all infants a selective neuronal necrosis and diffuse necrosis of neurons, Subcortical Leukomalacia were diagnoses.

Uncomplicated spontaneous vaginal delivery was in 33.3%; 11.1% were delivered with forceps and vacuum extraction; 44.4% infants born CS & 87.5% were emergency CS. Apgar sc. at 5 min < 4 had 94.4%. All infants received initial resuscitation. Artificial lung ventilation was first conducted to all newborns in the delivery room. Respiratory insufficiency III, irregularities of heart rate and blood pressure were present in all infants. Signs of multiorgan failure manifested in all newborns. Cramps - 18 infants. During the first 7-10 hours of life convulsions appeared in 50%. Fontanelles were bulged, suggesting increasing cerebral edema. All infants received treatment with according to protocol and symptomatic therapy. Currently remain the alive 16.7% All three surviving children have a deep neurological deficit - in one spastic quadriplegia. 15 infants - 83.3% died. Noteworthy: 8 infants born by CS, died 7. The diagnosis of Subcortical Leukomalacia been confirmed for all infants resulting mortem studies.

Conclusions. I. We have reason to suspect that in studied by us cases, emergency CS were carried late. In cases of fetal distress is very important time to produce CS. II. Numerous studies show that H-I cerebral damage develops in two phases: the first dominated by necrotic processes in the ischemic areas and the second dominated by apoptotic processes extending beyond ischemic areas. Therapeutic hypothermia has been indicated for asphyxiated full-term newborn infants according multicenter randomized controlled studies. The method of therapeutic hypothermia in newborns is necessary to implement in Ukraine asap.

THE INFLUENCE OF ATOPIC DERMATITIS ON THE QUALITY OF LIFE OF CHILDREN

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The aim: to analyze psychosocial aspects based on a comprehensive assessment of determine the quality of life parameters in families where a child suffers from atopic dermatitis

Materials and Methods. The study involved 62 families in which a child suffers from atopic dermatitis. The diagnosis of AD is installed in accordance of the classification and diagnostic criteria, according to the Protocol of diagnosis and treatment of atopic dermatitis in children №767 Ministry of Health of Ukraine. The age of surveyed children were from 3 to 11 years. The